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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,114	03/23/2004	Victor Lyamichev	FORS-08793	2778
23535	7590	07/17/2006	EXAMINER	
MEDLEN & CARROLL, LLP 101 HOWARD STREET SUITE 350 SAN FRANCISCO, CA 94105			MYERS, CARLA J	
			ART UNIT	PAPER NUMBER
			1634	

DATE MAILED: 07/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/807,114	Applicant(s) LYAMICHEV ET AL.	
	Examiner Carla Myers	Art Unit 1634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 66-72 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 66-72 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/23/2004</u> . | 6) <input type="checkbox"/> Other: ____.  |

### **DETAILED ACTION**

1. Claims 66-72 are pending and have been examined herein.

#### ***Specification***

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 66-72 are rejected under 35 U.S.C. 102(b) as being anticipated by Houghton et al (US Patent No. 5,863,719).

Houghton teaches a method for generating an extension product wherein the method comprises the steps of a) providing an oligonucleotide primer comprising a first region complementary to an accessible site on an RNA sequence, and a second region that is located 5' of the first region and which is not complementary to the RNA sequence (paragraph 45), ii) an RNA sequence comprising an accessible site, and iii) a reverse transcriptase; and b) exposing the oligonucleotide primer and RNA sequence to the reverse transcriptase under conditions in which the first region of the oligonucleotide

primer hybridizes to the RNA sequence and is extended to form an extension product (see paragraph 75). In particular, Houghton teaches that the oligonucleotide primer comprises a 5' portion that consists of sequences that are not complementary to the target sequence, such as sequences that include a restriction enzyme site for facilitating cloning of an amplified extension product into a vector (see paragraph 45). The 3' portion of the oligonucleotide primer consists of a target specific sequence that is of a length of 4 to 14 nucleotides in length (see paragraphs 41 and 42). Thereby, Houghton teaches the use of primers having a 3' first region of 6 nucleotides, 7 nucleotides, 8 nucleotides, 9 nucleotides or 10 nucleotides.

Regarding claim 72, the 5' sequence of the primer of Houghton is considered to have the property of being a sequence for "primer binding during further amplification of said extension product" since this 5' sequence could be used in a further primer extension assay as a binding site for the annealing of a primer.

4. Claims 66-72 are rejected under 35 U.S.C. 102(e) as being anticipated by Church et al (US Patent No. 6511803).

Church teaches a method for generating an extension product wherein the method comprises the steps of a) providing i) an oligonucleotide primer comprising a first region complementary to an accessible site on an RNA sequence, and a second region that is located 5' of the first region and which is not complementary to the RNA sequence (paragraphs 20, 28, 47-49), ii) an RNA sequence comprising an accessible site, and iii) a reverse transcriptase; and b) exposing the oligonucleotide primer and RNA sequence to the reverse transcriptase under conditions in which the first region of

the oligonucleotide primer hybridizes to the RNA sequence and is extended to form an extension product (see paragraphs 30-32 and 190). In particular, Church teaches that the oligonucleotide primer comprises a portion immediately 5' of the primer region wherein the portion consists of a region that is not complementary to the target RNA. Specifically, the region consists of a sequence that permits capture of the primer to an immobilized capture probe, a sequence that consists of a restriction enzyme site or a sequence that consists of a promoter site (paragraphs 47-49 and Example 6). Further, in the oligonucleotide of Church, the 3' portion of the oligonucleotide primer consists of a target specific sequence that may be of a length of is of a length of 6 to 100 nucleotides and preferably 10 to 30 nucleotides (paragraph 22 and Example 6). Thereby, Church teaches the use of primers having a 3' first region of 6, 7, 8, 9 and 10 nucleotides.

Regarding claim 72, the 5' sequence of the primer of Church is considered to have the property of being a sequence for "primer binding during further amplification of said extension product" since this 5' sequence is complementary to a restriction site, a promoter sequence or a capture sequence (see, e.g., paragraphs 20, and 47-49).


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carla Myers whose telephone number is (571) 272-0747. The examiner can normally be reached on Monday-Thursday from 6:30 AM-5:00 PM. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla, can be reached on (571)-272-0735.

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The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866)-217-9197 (toll-free).

Carla Myers  
Art Unit 1634

  
CARLA J. MYERS  
PRIMARY EXAMINER